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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/624,946	07/25/2000	Mark I. Greene	PENN-0708	7480

7590 02/26/2002
Jane Massey Licata
66 E Main Street
Marlton, NJ 08053

EXAMINER

TUNG, JOYCE

ART UNIT	PAPER NUMBER
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1637

DATE MAILED: 02/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/624,946

Applicant(s)
Greene et al.

Examiner
Joyce Tung

Art Unit
1637



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Nov 5, 2001
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above, claim(s) 1-4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claims 1-11 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other:

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Response to Amendment

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1637.

1. The amendment file 11/05/2001 has been entered.
2. Regarding the restriction requirement made on 7/05/2001, Applicants argue that Group I and Group II should be examined together based upon two criteria as set forth in the response (MPEP 803). As indicated in section 2 of the Office action mailed 7/05/2001, in this case, the process of claims 1-4 can be practiced by hand, while the system of claims 5-11 can be used to practice another and materially different process, for example, to detect nucleic acid. The requirement is still deemed proper and is therefore made FINAL.
3. The objection of the specification is withdrawn because of the amendment of the title.
4. Regarding Information disclosure statement, if references AB and AH are to be considered, it is required to submit the copy of the references.
5. The rejection of claims 5-11 under 35 U.S.C. §112, second paragraph is withdrawn because of the argument.
6. Regarding the rejection of claims 5, 6, and 8-11 under 35 U.S.C. §103(a) over Suzuki et al., in view of Skerra et al., Applicants argue that claim 8 and claims 9-11 have amended to

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clarify Fv fragment which is a single heavy or a light chain Fv attached to an oligonucleotide or a constrained epitope. However, the amended claim 8 does not really clarify claims 5 and 6.

In addition, Applicants further argue that the present invention has limited value as a quantitative detection method. However, the claim language is not directed to a quantitative detection method.

Applicants also argue that there is no teaching or suggestion by Suzuki et al. to use a detection means other than antibodies in the kit of the present invention, the epitope detector consists of a single heavy chain or a light chain Fv for a selected epitope attached to an oligonucleotide. The heavy chain and light chain Fv are consisted of antibodies.

Applicants argue that the secondary reference does not teach quantification of molecules expressing an epitope via an epitope detector consisting of a single chain Fv. As indicated above, the claim language is not directed to a quantitative detection method. Therefore the argument is not found persuasive and the rejection is maintained.

7. Claims 5-6 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (Jpn. J. Cancer Res., 1985, Vol. 86, pg. 885-889) in view of Skerra et al. (Science, 1988, Vol. 240, pg. 1038-1041).

8. Regarding the rejection of claim 7 under 35 U.S.C. 103(a) over Suzuki et al. in view of Skerra et al. and Quentin-Millet et al., as discussed in section 6 above, with the same reasons the rejection is maintained.

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9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (Jpn. J. Cancer Res., 1985, Vol. 86, pg. 885-889) in view of Skerra et al. (Science, 1988, Vol. 240, pg. 1038-1041) as applied to claims 5-6 and 8-11 above, and further in view of Quentin-Millet et al. (4,965,205).

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Joyce Tung whose telephone number is (703) 305-7112. The examiner can normally be reached on Monday-Friday from 8:00 AM-4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached at (703) 308-1119 on Monday-Friday from 10:00 AM-6:00 PM.


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Any inquiries of a general nature or relating to the status of this application should be directed to the Chemical/Matrix receptionist whose telephone number is (703) 308-0196.

12. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Art Unit 1656 via the PTO Fax Center located in Crystal Mall 1 using (703) 305-3014 or 308-4242. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989).

Joyce Tung

February 13, 2002


GARY BENZION, PH.D.
SUPERVISORY/PATENT EXAMINER
TECHNOLOGY CENTER 1600